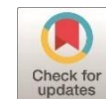


■ ORIGINAL RESEARCH ARTICLE

Work Motivation Across Employee Generations in Croatia



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Submission: 4 September 2025 | Revision: 2 December 2025 | Acceptance: 9 December 2025

Published: 13 December 2025

<https://doi.org/10.22598/pi-be/2025.2.39239>

ABSTRACT

Purpose: Motivating employees has always been a challenge, particularly in today's diverse workforce. Organizations must address the distinct needs of multiple generations coexisting in the labor market, each characterized by specific work attitudes, loyalty patterns, interpersonal dynamics, and motivational drivers, which may lead to generational gaps. The study examines the relationship between motivational factors and generational preferences among four economically active cohorts (Baby Boomers, Generation X, Generation Y, and Generation Z) in Croatia. **Design/Methodology:** A questionnaire-based survey was conducted in 2024 among employed individuals, exploring socio-demographic characteristics and motivational preferences. Data were collected using the snowball sampling method and analyzed through various statistical techniques. **Findings:** The study confirms some theoretical assumptions regarding generational differences but also identifies considerable overlap in motivational preferences, particularly related to external motivators, technological advancement, innovation, and work-life balance. Although certain distinctions exist, no statistically significant differences in overall motivation among generations were found. **Practical implications:** The findings highlight the importance of combining generation-specific approaches with universally relevant motivators to enhance employee engagement, satisfaction, retention, and organizational performance. **Originality/Value:** The paper contributes to the understanding of intergenerational motivational differences within a local segment of the Croatian labor market and offers practical insights for managers seeking to implement effective, evidence-based motivational strategies.

Keywords: employee motivation, work motivation, generational differences, multigenerational workforce, Croatia

JEL codes: J24, M12, M54

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Available online 13 December 2025

ISSN 1846-3355 / © 2025 The Author(s). Published by Poslovna izvrsnost – Business Excellence, University of Zagreb Faculty of Economics & Business.

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Funding: This research did not receive any specific grant from public, commercial, or non-profit funding agencies.

Conflicts of Interest: The authors declare no conflicts of interest.

CRedit statement: Conceptualization – I.T., A.Ž.; Methodology – I.T., A.Ž.; Formal analysis – A.Ž.; Investigation – A.Ž.; Data curation – A.Ž.; Writing – original draft – A.Ž.; Writing – review & editing – I.T.; Supervision – I.T.

Data Availability Statement: The data supporting the findings of this study are available from the authors upon request.

1. Introduction

Work motivation is a crucial issue in everyday business, as it involves aspects of human behavior within the work environment. Motivation can be defined as “the strength and direction of behavior and the factors that influence people to behave in a certain way” (Armstrong & Taylor, 2014). It concerns the internal process that energizes, directs, and sustains behavior (Reeve, 2016), or explains why a person in a given situation selects one response over another (Bargh et al., 2010). Reviewing these and other definitions from prominent researchers and authors, motivation includes several basic concepts: first, the energy, power, or impulse that drives behavior toward a goal; second, direction, which represents a specific goal; and finally, persistence, or the ability to remain focused on reaching the goal despite obstacles.

Although motivation is often regarded as a single construct, Ryan and Deci (2000) explained that people are usually driven by different motivational factors. The main accepted classification of motivation types is extrinsic and intrinsic motivation. Extrinsic and intrinsic motivation are often seen as opposing forces, but in fact, they are complementary and can reinforce each other in various ways. They state that extrinsic motivation refers to doing something because it leads to a separable outcome. This type of motivation suggests that individuals engage in certain activities due to potential external rewards or pressures, rather than because they personally find those activities interesting or satisfying. For example, extrinsic motivational factors include rewards that come from outside the individual. In the workplace, these are mostly financial rewards, such as salary, bonuses, or other financial benefits, but can also include recognition, such as promotion, reputation, larger office space, use of a company car, and similar incentives. Extrinsic motivators can have an immediate and powerful effect, but they may not last long (Armstrong & Taylor, 2014) and, compared to intrinsic motivational factors, are considered pale and impoverished (Ryan & Deci, 2000).

In contrast, intrinsic motivation refers to doing something because it is inherently interesting or enjoyable, or because of one's own satisfaction and joy. It can be described as an inner drive that encourages individuals to engage in certain activities or tasks for inner satisfaction, interest, or the challenge the activity provides, usually resulting in deeper and longer-term effects (Ryan & Deci, 2020). Intrinsically motivated employees participate in activities due to their personal enthusiasm, finding them enjoyable or interesting (Zeynali et al., 2019). Other intrinsic motivational factors in the workplace include challenge, creativity, job autonomy, self-esteem, achievement, growth, or a sense of belonging within the daily work environment.

From the employer's perspective, it is challenging to identify unique motivational factors that will satisfy all employees, especially since today's workforce includes four different generations: Baby Boomers, Generation X, Generation Y, and Generation Z. Each generation has distinct aspirations, expectations, and future goals and is therefore motivated by different factors. A generation is defined as a “cohort of people who were born and came of age together through (roughly) a twenty-year period of history,” which includes historical and cultural events, music, slang, technological innovations, and other practices and trends (Sauser & Sims, 2014, p. 3). Given the specific characteristics of each generation, managing different generations within organizations presents a significant

challenge for managers. Furthermore, when an organization operates in such an environment, every manager must align employee expectations and maximize each employee's motivation to achieve the desired business results.

Although generational differences in work motivation are often emphasized in academic and professional discussions, several empirical studies have reported modest or inconsistent effects, suggesting that assumed differences may partly reflect age or period influences rather than stable cohort characteristics (Wong et al., 2008; Twenge et al., 2010; Heyns & Kerr, 2018; Egerová et al., 2024; Kupczyk et al., 2024). These findings highlight the need for further empirical examination, particularly in underexplored contexts. Croatia and its local labor markets remain insufficiently examined in this regard, and evidence on motivational patterns across generations within specific organizational settings is limited. Here we address this gap by examining intrinsic and extrinsic motivational factors among four economically active generations in the labor market of Split, providing localized empirical insight and testing whether theoretically expected generational differences are statistically supported. The Split labor market offers a relevant setting because it reflects the multigenerational employment structure and service-based occupational distribution typical of contemporary Croatian urban labor markets.

This research examines members of the four generations currently active in the labor market across various companies in Croatia, focusing specifically on Split, the country's second largest city. We aim to measure the presence of motivational factors characteristic of each generation of employees in Split and to compare generational differences, identifying which generation demonstrates the highest level of work motivation. Drawing on relevant theoretical sources and previous research regarding generational characteristics related to work motivation, two assumptions about general motivational differences among the four currently economically active generations in the Split area are presented.

- *Assumption 1:* Baby Boomers show more pronounced extrinsic motivational factors compared to the other generations surveyed.
- *Assumption 2:* Members of the Millennial generation are the most motivated to work compared to members of other generations.

The research ultimately seeks to demonstrate how motivation differs among generations and to provide managers with guidance on effectively motivating employees from diverse generations. Additionally, the paper aims to identify the motivational factors most strongly associated with each generation, with particular emphasis on the impact of technological development and work-life balance as contemporary trends in everyday work activities. To this end, the paper offers two additional assumptions:

- *Assumption 3:* Generation Z is more motivated by technological advancement and innovation in their work compared to Generation Y.
- *Assumption 4:* Generation Y is more motivated by work-life balance than Generation X.

2. Literature review

As previously mentioned, generations of employees are defined by different aspirations, expectations, goal orientations and motivations to work. Typically, members of the same generation mutually share a time frame of fifteen to twenty years, common experiences, consciousness and social and cultural conditions. Global trends of an aging population will result in an increased need for younger workers in the future, while the gap between younger and older employees will become even more pronounced (Karácsony, 2019). Today, more generations than ever before are interacting in workplaces, communities, families and households. Understanding their differences and developing appropriate motivation strategies are crucial for building cohesive communities. From a business

perspective, understanding generations enables managers to create an effective intergenerational organization, thereby achieving a competitive advantage. Although today seven different living generations are recognized, the Silent Generation (also known as Traditionalists or Builders), Baby Boomers (also known as the Me Generation), Generation X (also known as the Invisible or Lost Generation), Generation Y (also known as Millennials), Generation Z, Generation Alpha and Generation Beta (newborns), four of these are active in the labor market. Managing and especially motivating members of four different generations (Baby Boomers, Generation X, Generation Y and Generation Z) presents a significant challenge. The classification of generations can vary by a few years among different authors; however, one generally accepted framework recognizes the following: Baby Boomers from 1946 to 1964, Generation X from 1965 to 1979, Generation Y from 1980 to 1994 and Generation Z from 1995 to 2010 (Karácsony, 2019).

The oldest generation currently in the labor market, Baby Boomers (although most are already retired), are recognized as optimistic individuals, rich in experience and knowledge, displaying competitiveness and a learning orientation, who consciously built their careers and at the same time are willing to sacrifice for career (Davis et al., 2006; Sauser & Sims, 2014). They are hard workers, demonstrate strong work ethics and are loyal to their employers (Krasulja et al., 2015). The period from 1946 to 1964 was known as the “baby boom” period in the USA, marked by a significant increase in the birth rate. Members of this generation entered the labor market during a time of “full employment, when middle class jobs were increasing rapidly” (Roberts, 2012, p. 483). Specific research has investigated differences between Baby Boomers and Generation X within the IT sector and revealed higher continuance commitment to the profession among Baby Boomers (Davis et al., 2006). This can be attributed to the characteristics of Baby Boomers, who are often described as workaholics and willing to make sacrifices for their careers. In addition to different generational differences, the authors explain that it becomes more difficult to change careers and relocate as employees age, and the return on investment in this age group is lower. Baby Boomers also show a strong relationship between better development and training opportunities and career growth and a moderate relationship between development and training opportunities and more interesting work (Maříková et al., 2025). This can be explained by the characteristics of the Baby Boomers generation, such as their orientation towards learning and conscientiousness in career growth. They need to combine work they perceive as interesting with opportunities for continuous education and professional development. Slovakian research demonstrates that appreciation and recognition are the primary motivational factors for the Baby Boomers generation (Karácsony, 2019), as a result of their hard work and loyalty to their employer. The same research also confirms that, although job security is not among the greatest motivators for this generation, it is perceived as the greatest compared to all other economically active generations. Compared to other generations, Baby Boomers value job stability and recognition as important motivational factors, but also report higher average values of financial evaluation, uncertainty in the company and conflict with supervisors (Řehoř et al., 2023).

Generation X, often referred to as the “lost generation,” is symbolized by the letter “X”, representing something unknown or missing. They are sometimes considered to be caught between the Baby Boomers and Generation Y, as companies previously focused on Baby Boomers and now focus on Generation Y and Generation Z, as the developing workforce. Members of Generation X are known for their independence, creativity and innovation. They are mostly results oriented and, although they are not opposed to working hard, they do not believe in job security (Davis et al., 2006; Sauser & Sims, 2014; Karácsony, 2019). They value job flexibility and expect regular opportunities for career growth, but also strive for work life balance and flexibility (Heyns & Kerr, 2018; Waworuntu et al., 2022). Considering specific generational characteristics, preferences and needs, different

motivational factors were examined. The strongest positive correlation for Generation X was found between the option to work from home and a large benefits package (0.5101) as well as between more interesting job content and career growth (0.505) (Maříková et al., 2025). These findings align with previous descriptions of Generation X, portraying its members as seeking flexibility and career development, while also being hard workers. Continuing this comparison of work motivation between Generation X and Generation Y, members of Generation X, among various extrinsic and intrinsic motivational factors, show the greatest distinctiveness regarding the work itself. They are recognized as highly satisfied with the work they do, in contrast to Generation Y, which is only slightly satisfied. Generation Y grew up in the digital age, surrounded by modern technology and media. They are the most educated generation to date and are highly technologically literate. A key characteristic of this generation is that they grew up with computers, the internet and mobile devices, never knowing a world without digital technology, which is integrated into all aspects of their professional and private lives (Verma et al., 2024). Some top job characteristics that Generation Y seeks are a positive work life balance, good relationships with colleagues and superiors, a fun working environment and job security (Van Den Bergh & De Wulf, 2017). They also seek to socialize, are team oriented, ambitious, self-confident and they report higher overall company satisfaction and satisfaction with job security than previous generations (Manuti et al., 2018). Research into the most recognized motivational factors for members of Generation Y identifies connections between career growth and financial compensation, remote work and benefits and finally preferences for job content and educational opportunities (Maříková et al., 2025). These factors support generational characteristics such as seeking a positive work life balance and being ambitious. Compared to other economically active generations, Millennials place the greatest importance on personal development, career advancement, achievement and advantageous working hours (Fero & Dokoupilová, 2019). Affirming Generation Y as a generation that is highly motivated to work and using Work Motivation Questionnaire comprising six motivational dimensions, Generation Y demonstrated high motivation in each specific dimension, as well as overall motivation, in line with Generation X.

Generation Z, the youngest generation in the labor market, grew up during a global recession and under technological dominance, never knowing life without mobile phones, computers and television. They are usually impatient, accustomed to having everything instantly available with just one click (Rupčić, 2021; Lopez & Abadiano, 2023). They value flexible working hours, a good work life balance, high salaries as the importance of financial stability, and opportunities for innovation. They are goal oriented, possess strong digital and language skills, are innovative, think creatively, capable of working in teams and accept people who are different from themselves, being the most ethnically diverse team, ready to discuss mental health and gender equality. At the same time, they are less aware of global problems than previous generations and lack problem solving skills, because they rely too much on technology (Bako, 2018; Bińczycki et al., 2023; Hendriana et al., 2023). Generation Z is a technologically dependent generation, motivated by e learning with an interactive approach, focusing on applying and contextualizing concepts rather than memorizing them (Lopez & Abadiano, 2023). Access to modern technologies is more crucial for members of Generation Z compared to other generations (Czerwińska-Lubarczyk & Jankowiak, 2025). Generation Z is regarded as the generation that, among all other economically active generations, is highly motivated by salary, flexibility and autonomy and least motivated by job security, not being focused on the long run (Karácsony, 2019). They have specific expectations regarding work life balance, flexibility and vacation leave, such as harmony between workload and personal life and the option to work from home (Waworuntu et al., 2022). Although they value financial stability, they prioritize work comfort, work life balance and mental health over it (Hendriana et al., 2023).

Based on the previous theoretical insights, each generation has unique characteristics, experiences and values that shape its motivational needs. In the business world, generational differences influence how employees perceive and respond to various motivational strategies. However, recent studies emphasize that these differences should be interpreted with caution, as part of the variation in work-related expectations may stem from broader socioeconomic and temporal changes rather than from generational membership alone (Egerová, Komárková & Rotenbornová, 2024). Each generation has different motivational drivers. For some generations, intrinsic motivational factors may be more significant, while for others, extrinsic factors may predominate. Regardless of whether an organization operates in a multigenerational environment, it is essential to create a work environment that maximizes employee motivation.

3. Methodology

The research was conducted among employees from different generations using a survey questionnaire as the primary research instrument, focusing on extrinsic and intrinsic motivational factors. The study took place in mid-2024. The questionnaire was created using the Google Forms platform and distributed to respondents via social networks, primarily WhatsApp. Initial respondents were contacted through personal and professional networks in the Split area and subsequently forwarded the questionnaire to additional participants using snowball sampling, resulting in a final sample of 91 respondents from different industries. The questionnaire consisted of 14 closed-ended questions. Questions 1 through 7 collected basic demographic information necessary for sample segmentation and hypothesis testing across generations, while Questions 8 through 14 assessed levels of motivation based on intrinsic and extrinsic factors, as well as attitudes toward work.

Two primary criteria for participation were established. First, respondents were required to be currently employed, and second, they had to be employed in the area of Split and its surroundings. Based on these criteria, the analysis includes filtered data from all respondents who met the requirements, resulting in a total of 91 valid responses.

Table 1

Structure of respondents.

Variable	Category	Frequency	Percent
Gender	Male	29	31.86
	Female	61	67.03
	Not responding	1	1.09
	TOTAL	91	100.00
Generation	Baby Boomer	18	19.78
	Generation X	27	29.67
	Generation Y	25	27.47
	Generation Z	21	23.07
	TOTAL	91	100.00
Work in a multigenerational environment	Yes	83	91.21
	No	8	8.79
	TOTAL	91	100.00

Note. Source: Authors' calculation using MS Excel.

According to the results in Table 1, the largest proportion of respondents is female, with 61 individuals or 67.03 percent, compared to male respondents, who make up 31.86 percent. Although the distribution among generations within the research sample is fairly similar, the largest share is found within Generation X, 29.67 percent, followed by Generation Y, 27.47 percent, Generation Z, 23.07 percent, and finally Baby Boomers, 19.78

percent. It is noteworthy that 91.21 percent of respondents work in a multigenerational environment.

4. Results

The main focus of this research was motivational factors, specifically extrinsic and intrinsic motivational factors related to a particular generation of employees. Respondents used a scale from 1 to 5 to rate each motivational factor, where 1 means not motivated at all and 5 means extremely motivated. The questionnaire included five external motivational factors and six internal motivational factors.

Table 2

External motivational factors – descriptive statistics.

Variable	N	Minimum	Maximum	Mean	SD	Variance
Financial rewards	91	1	5	4.13	1.10	1.21
Recognition	91	1	5	3.75	1.19	1.41
Career development	91	1	5	3.91	1.09	1.19
Stable job position	91	1	5	3.88	1.12	1.26
Benefits	91	1	5	3.46	1.32	1.74
Valid N/TOTAL	91			3.83		

Note. Source: Authors' calculation using SPSS.

According to the descriptive statistics in Table 2, the highest external motivational factor is financial reward, with an average score of 4.13, while the lowest is benefits, with an average score of 3.46. The overall average score for external motivational factors is 3.83.

Table 3

Internal motivational factors – descriptive statistics.

Variable	N	Minimum	Maximum	Mean	SD	Variance
Challenge	91	1	5	3.46	1.29	1.65
Sense of competence	91	1	5	3.85	1.16	1.35
Work independence	91	1	5	4.11	1.11	1.23
Work creativity	91	1	5	3.49	1.29	1.65
Belonging to the company	91	1	5	3.53	1.20	1.43
Interesting job	91	1	5	3.76	1.16	1.34
Valid N/TOTAL	91			3.70		

Note. Source: Authors' calculation using SPSS.

According to the descriptive statistics in Table 3, the most significant internal motivational factor is work independence, with an average score of 4.11, while the lowest is challenge, with an average score of 3.46. The overall average score for internal motivational factors is 3.70.

Because Baby Boomers are interested in development and training opportunities, continuous education, career growth, professional development, and recognition (Karácsony, 2019; Maříková et al., 2025), Assumption 1 was proposed regarding external motivational factors. Assumption 1 states that Baby Boomers exhibit more pronounced extrinsic motivational factors compared to the other surveyed generations. Therefore, it is important to conduct a more detailed analysis of external factors for each generation of employees.

Table 4*External motivational factors by generations of respondents (mean).*

Variable	Baby Boomers	Gen. X	Gen. Y	Gen. Z
Financial rewards	4.06	3.85	4.20	4.48
Recognition	3.56	3.41	3.80	4.29
Career development	3.28	3.63	4.08	4.62
Stable job position	3.72	4.19	3.64	3.90
Benefits	2.56	3.22	3.68	4.29
Valid N	18	27	25	21

Note. Source: Authors' calculation using MS Excel.

According to the results in Table 4, the greatest external motivational factor for Baby Boomers is financial reward, with an average score of 4.06. However, this is not considered the greatest motivational factor for the Baby Boomer generation compared to others. The majority of external factors are considered the greatest motivators for the youngest generation, Generation Z.

To test Assumption 1, further analysis is needed. An ANOVA test is applied, enabling the comparison of mean levels of extrinsic motivational factors across the four independent generations in order to determine whether the observed differences are statistically significant.

Table 5*ANOVA test of the level of motivation by extrinsic factors among generations.*

Variable	Source of variation	Sum of squares	df	Mean Square	F	Sig.
Financial rewards	Between groups	4.828	3	1.609	1.351	.263
	Within Groups	103.590	87	1.191		
	Total	108.418	90			
Recognition	Between groups	9.938	3	3.313	2.458	.068
	Within Groups	117.249	87	1.348		
	Total	127.187	90			
Career development	Between groups	20.597	3	6.866	6.889	< .001
	Within Groups	86.700	87	.997		
	Total	107.297	90			
Stable job position	Between groups	4.416	3	1.472	1.172	.325
	Within Groups	109.255	87	1.256		
	Total	113.670	90			
Benefits	Between groups	31.779	3	10.593	7.382	< .001
	Within Groups	124.837	87	1.435		
	Total	156.615	90			

Note. Source: Authors' calculation using SPSS.

Analyzing the results in Table 5, two external motivational factors, “Career development” and “Benefits”, show a statistically significant difference between generations of employees, while the other variables do not. This indicates that, although differences exist in career development and benefits, all generations of respondents have similar motivation levels for most extrinsic motivational factors, and none of these factors is more important for one generation than another. To identify which generations differ after the ANOVA indicated a statistically significant effect, an additional Tukey HSD test was conducted, as shown in Table 6.

A more detailed analysis shows that Baby Boomers exhibit a statistically significant difference in the motivational factor “Career development” from Generation Z. However, according to previously stated results, the motivational factor “Career development” receives a lower rating, 3.28, from Baby Boomers than from Generation Z, whose rating is 4.62. Additionally, Tukey’s HSD test indicates a statistically significant difference in motivation regarding the “Benefits” factor between Baby Boomers and both Generation Y and Generation Z. Again, Baby Boomers have a lower level of motivation for this factor, 2.56, compared to Generation Y, whose rating is 3.68, and Generation Z, whose rating is 4.29.

Table 6

Tukey’s HSD test of the level of motivation by different extrinsic motivational factors among generations.

Dependent variable	Gen. ^a	Gen. ^a	Mean Difference	SE	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Career development	1	2	-0.35	0.30	.655	-1.15	0.44
		3	-0.80	0.31	.053	-1.61	0.01
		4	-1.34	0.32	< .001	-2.18	-0.50
	2	1	0.35	0.30	.655	-0.44	1.15
		3	-0.45	0.28	.370	-1.18	0.28
		4	-0.99	0.29	.005	-1.75	-0.23
	3	1	0.80	0.31	.053	-0.01	1.61
		2	0.45	0.28	.370	-0.28	1.18
		4	-0.54	0.30	.269	-1.31	0.24
	4	1	1.34	0.32	< .001	0.50	2.18
		2	0.99	0.29	.005	0.23	1.75
		3	0.54	0.30	.269	-0.24	1.31
Benefits	1	2	-0.67	0.36	.267	-1.62	0.29
		3	-1.12	0.37	.016	-2.09	-1.55
		4	-1.73	0.39	< .001	-2.74	-0.72
	2	1	0.67	0.36	.267	-0.29	1.62
		3	-4.58	0.33	.517	-1.33	0.41
		4	-1.06	0.35	.016	-1.98	-1.51
	3	1	1.12	0.37	.016	0.15	2.09
		2	-4.58	0.33	.517	-0.41	1.33
		4	-0.61	0.35	.326	-1.53	0.32
	4	1	1.73	0.38	< .001	0.72	2.74
		2	1.06	0.35	.016	0.15	1.98
		3	0.61	0.35	.326	-0.32	1.53

Note. ^aGenerations: 1 = Baby Boomers; 2 = Generation X; 3 = Generation Y, 4 = Generation Z.

Source: Authors’ calculation using SPSS.

Based on the descriptive statistics, the ANOVA test and the additional Tukey's HSD test, the previous assumption that Baby Boomers have a higher level of motivation driven by extrinsic factors compared to other generations is rejected. Although Baby Boomers are highly motivated by the factor "Financial rewards", the differences in motivation are not statistically significant compared to the level of motivation for the same factor among other generations. In contrast, younger generations, particularly Generations Y and Z, show a significantly higher level of motivation for the factors "Career development" and "Benefits", indicating that younger generations are more motivated by these factors than Baby Boomers.

Further, considering previous theoretical aspects of the Millennial generation, such as being self-confident, ambitious and highly educated, as well as the specific social, technological and economic contexts in which they grew up, we proposed Assumption 2. Members of the Millennial generation are the most motivated to work compared to members of other generations of employees.

For Assumption 2, the ANOVA test was first applied, as shown in Table 7, to determine whether there are statistically significant differences in the overall level of work motivation among the four different generations of respondents. This analysis was based on the question "How much are you motivated to work?", using a scale from 1 to 5, where 1 means not motivated at all and 5 means extremely motivated.).

Table 7

ANOVA test for the overall level of work motivation among generations.

Source of variation	Sum Squares	df	Mean Square	F	Sig.
Between Groups	2.574	32	.858	.643	.590
Within Groups	116.151	87	1.335		
Total	118.725	90			

Note. Source: Authors' calculation, using SPSS.

Considering the overall motivation of the respondents in the sample, Assumption 2 cannot be accepted, as there are no statistically significant differences in motivation levels between the generations.

Although post hoc tests are typically applied only when ANOVA indicates a significant overall effect, Tukey's HSD test was additionally used for explanatory purposes to examine potential differences. The results support the assumption that Generation Y, or the Millennial generation, is the most motivated to work (3.72) compared to other generations. However, these differences were not statistically significant (Table 8); therefore, Assumption 2 cannot be accepted.

Table 8

Tukey's HSD test of the level of motivation to work among generations.

Generations	N	Subset for alpha = 0.05
		1
Baby Boomers	18	3.56
Generation X	27	3.33
Generation Y	25	3.72
Generation Z	21	3.33
Sig.		.681

Note. Means for groups in the homogeneous subsets are shown; group sizes are unequal, and the harmonic mean sample size (≈ 22.20) is used; Type I error rates may not be guaranteed.

Source: Authors' analysis using SPSS.

Furthermore, considering the specific characteristics of the contemporary work environment and the modern nature of work, two motivational factors were selected for more detailed analysis. Although Generation Y grew up in the digital age, Generation Z is the only generation that does not recognize life without digital technology and is fully surrounded by technological dominance (Czerwińska-Lubszczyk & Jankowiak, 2025). Therefore, Assumption 3 was proposed: Generation Z is more motivated by technological advancement and innovation in their work compared to Generation Y.

The respondents rated their personal attitudes toward technological advancement and innovation within their work positions on a 1–5 Likert scale (1 = not motivated at all; 5 = extremely motivated). To provide an initial comparison of generational differences in motivation toward technological advancement and innovation, descriptive statistics for Generation Y and Generation Z are presented in [Table 9](#).

Table 9

Descriptive statistics of motivation toward technological innovations in the workplace for Generation Y and Generation Z.

Variable	Generation	N	Mean	SD	SE
Attitudes toward technological innovations	Generation Y	25	4.16	0.85	0.17
	Generation Z	21	3.95	0.97	0.21

Note. Source: Authors' calculation using SPSS.

The average score for Generation Y regarding motivation toward the use of technological advancements and innovation is 4.16, while for Generation Z it is 3.95. Although the descriptive statistics suggest a slightly higher level of motivation in Generation Y, these differences require further statistical analysis and verification. To assess whether the observed differences in motivation toward technological advancement and innovation between Generation Y and Generation Z are statistically significant, an independent t-test, preceded by Levene's test for equality of variances, is conducted ([Table 10](#)).

Table 10

Results of Levene's test for equality of variances and t-test for motivation by technological advancement and innovation between Generations Y and Z.

		Independent Sample Test Levene's Tests for Equality of Variances								95% Confidence Interval of the Difference	
		<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	One- sided <i>p</i>	Two- sided <i>p</i>	Mean difference	<i>SE</i>	Lower	Upper
Attitudes toward technological advancement and innovation	Equal variances assumed	0.54	0.47	0.77	44	.22	.44	0.21	0.27	-0.33	0.75
	Equal variances not assumed			0.76	40.12	.23	.45	0.21	0.27	-0.34	0.76

Note. Source: Authors' calculation using SPSS.

Observing the results in the table above, Levene's test for equality of variances yields a $p = .47$, which is above the significance threshold of 0.05, indicating that the assumption of equal variances is valid. For the t-test assuming equal variances, the t-value is 0.77 with 44 degrees of freedom and a two-tailed p-value of 0.44, which is above the significance threshold of 0.05. This indicates that there is no statistically significant difference in motivation regarding technological advancement and innovation between Generations Y and Z. The mean difference is 0.21, with a confidence interval ranging from -0.33 to 0.75.

Although some differences related to technological advancements and innovation exist between Generation Y (4.16) and Generation Z (3.95), these differences are not statistically significant; therefore, the proposed assumption (3) cannot be accepted. Finally, assumption 4 proposes that Generation Y is more motivated by work-life balance than Generation X.

Table 11

Descriptive statistics of motivation toward work-life balance for Generation X and Generation Y.

Variable	Generation	N	Mean	SD	SE
Work-life balance	Generation X	27	4.15	1.03	0.20
	Generation Y	25	4.60	0.71	0.14

Note. Source: Authors' calculation using SPSS.

Previous theoretical elaborations emphasize the importance of work-life balance for the work motivation of Generation Y (Van Den Bergh & De Wulf, 2017). Consistent with this, the descriptive statistics (Table 11) show that Generation Y reports a higher average score for work-life balance (4.60) than Generation X (4.15). To determine whether the observed difference in mean work-life balance motivation between Generation X and Generation Y is statistically significant, an independent samples t-test preceded by Levene's test for equality of variances is conducted (Table 12). These differences are not statistically significant, according to the t-test ($t = -1.83$, $p = 0.07$). Levene's test for equality of variances ($p = 0.24$) indicates that the variances are equal between the groups; therefore, the results for "Equal variances assumed" were used.

Table 12*T-test of motivation by work-life balance between Generations X and Y.*

		Independent Sample Test								95% Confidence Interval	
		Levene's Tests for Equality of Variances								of the Difference	
		<i>F</i>	<i>Sig.</i>	<i>t</i>	<i>df</i>	One-sided <i>p</i>	Two-sided <i>p</i>	Mean difference	<i>SE</i>	Lower	Upper
Attitudes toward technological advancement and innovation	Equal variances assumed	1.36	.25	-1.83	50	.036	.073	-0.45	0.25	0.95	0.04
	Equal variances not assumed			-1.86	46.29	.035	.069	-0.45	0.24	-0.94	0.04

Note. Source: Authors' calculation using SPSS.

The effect size, measured using Cohen's d (Table 13), was calculated to explore the possible magnitude of the difference in motivation regarding work-life balance between Generations X and Y, given that the t -test was not statistically significant. Although the point estimates (Cohen's $d = 0.89$, Hedges' $g = 0.90$, Glass's $\delta = 0.71$) appear relatively large, they should be interpreted with caution. Wide confidence intervals that include zero indicate that the true effect may be negligible, and effect size estimates based on small samples are known to be unstable (Field, 2018). Therefore, these effect size estimates cannot be considered reliable evidence of a true generational difference. Finally, assumption 4 cannot be accepted.

Table 13

Independent sample effects of motivation for work-life balance.

			95% Confidence interval		
Standardizer ^a			Point Estimate	Lower	Upper
Work-life balance	Cohen's d	.89	-0.509	-1.06	0.05
	Hedges' correction	.90	-0.501	-1.04	0.05
	Glass's delta	.71	-0.639	-1.21	-0.06

Note. ^a The denominator used in estimating the effect sizes; Cohen's d uses the pooled standard deviation; Hedge's correction uses the pooled standard deviation, plus a correction factor; Glass's δ uses the sample standard deviation on the control (i.e., the second) group. Source: Authors' calculation using SPSS.

5. Discussion

This study examined intergenerational differences in work motivation within the labor market of Split and investigated whether theoretically expected distinctions among Baby Boomers, Generation X, Generation Y, and Generation Z would be statistically supported. Although none of the proposed assumptions were confirmed, several patterns emerged that help clarify how generational characteristics may shape motivational tendencies within a localized context. The findings also support earlier research indicating that generational categories often account for less variance in work-related attitudes than presumed (Wong et al., 2008; Twenge et al., 2010; Heyns & Kerr, 2018; Egerová et al., 2024).

The results related to Assumption 1 showed that Baby Boomers did not display higher levels of extrinsic motivation than younger generations. Instead, Generation Z rated most extrinsic factors more highly, particularly career development and benefits. These outcomes align with studies reporting that younger cohorts increasingly prioritize financial rewards, advancement, and resource-based incentives (Twenge et al., 2010). They also challenge the common portrayal of Baby Boomers as consistently driven by external indicators of success. The findings parallel Wong et al. (2008), who observed no meaningful generational differences in job-security motivation, and provide additional evidence that extrinsic motivation may be more sensitive to contextual economic conditions than to cohort identity.

Assumption 2 focused on whether Millennials would demonstrate the highest level of overall work motivation. The results did not reveal statistically significant differences among any of the generations. Although Generation Y recorded the highest mean value, the between-group variance was small. Several authors have emphasized that observed generational differences may reflect age-related life stages or broader socioeconomic shifts rather than stable cohort effects (Egerová et al., 2024). The present findings are consistent with this view. They also align with Heyns and Kerr (2018), who found only minor motivational distinctions among cohorts, and with Kupczyk et al. (2024), who reported that Generation X and Generation Z sometimes exhibit higher motivation than Millennials,

depending on organizational and sectoral contexts. The lack of distinct motivational profiles in this research suggests that individual and organizational characteristics may outweigh generational identity in explaining motivation levels.

The analysis of Assumption 3 indicated that Generation Z did not show stronger motivation for technological advancement and innovation than Generation Y. Although Generation Z is often portrayed as the most technologically immersed cohort, the results revealed similar motivational levels between the two groups. Both generations grew up with pervasive digital technologies, which may explain the lack of differentiation. It is consistent with studies such as Alaa and Refaat El Said (2022), which reported similar behavioral intentions regarding the adoption of mobile systems among Generations Y and Z. The results therefore reinforce the argument that technological familiarity is no longer a distinctive generational marker, especially in contemporary work environments where digital competencies are widely distributed.

Assumption 4, which proposed that Generation Y would be more motivated by work-life balance than Generation X, was also not confirmed. Although the descriptive means showed higher values for Generation Y, the differences were not significant. This result is notable given that work-life balance is widely cited as a defining preference of younger cohorts (Van Den Bergh & De Wulf, 2017). Generation X—often positioned between career demands and family responsibilities—may value balance equally or even more, which aligns with findings from Bhandari et al. (2025). The results therefore suggest that work-life balance may be a shared priority across cohorts rather than a distinguishing motivational factor.

Across all analyses, the consistently small and statistically insignificant differences point to a broader conclusion: generational categories may have limited explanatory value for understanding motivational patterns within this regional labor market. The findings support studies arguing that differences attributed to generations may instead reflect contextual, occupational, or organizational influences (Wong et al., 2008; Egerová et al., 2024). The convergence of motivational scores across age groups suggests that similar workplace expectations, shared economic conditions, and comparable organizational practices in the Split area may narrow motivational gaps that might appear in more heterogeneous labor markets. The study also contributes to the discussion on the practical relevance of generational classifications. Because the results indicate that motivational preferences do not systematically differ across generations, managerial strategies based solely on generational assumptions may be misguided. Research increasingly emphasizes the risk of relying on generational stereotypes, which can overshadow more substantive determinants of employee behavior such as job design, recognition, autonomy, and development opportunities (Twenge et al., 2010; Manuti et al., 2018). The findings from this study support a more individualized and context-specific approach to motivation, where managers focus on concrete motivational drivers rather than broad generational labels.

The localized nature of this study extends existing research by providing empirical evidence from a mid-sized European labor market that has not been widely examined in the generational motivation literature. The results show that motivational dynamics in Split follow patterns similar to those reported in other international contexts, suggesting that converging workplace expectations may transcend generational distinctions. This adds nuance to the ongoing debate about the validity and utility of generational constructs in organizational research and practice.

6. Limitations and further research

The paper has several limitations that may have influenced the analysis and conclusions. The most significant limitation is the sample size. The research included a relatively small number of respondents in each group, and the overall sample is quite limited, so the findings are insufficient to generalize about the wider population. Another limitation arises

from the initial contacts used to initiate the snowball sampling, which may have introduced selection bias into the respondent pool. Furthermore, the share of respondents is not evenly distributed by gender, with approximately two-thirds being women. This imbalance may result from higher female response rates in surveys and the initial channels used in snowball sampling. In addition to the sample size and composition, further limitations may arise from differences among respondents based on their professional fields. As different sectors and industries have specific work environments, conditions, and cultures, they may lead to different motivational factors that are relevant to some groups but not to others. More homogeneous groups, in terms of similar professions or work environments, might have produced different results. The analysis was conducted within a specific geographical area, the local region of Split. Although similar patterns might be expected in other parts of Croatia, the findings cannot be confidently generalized to the entire Croatian labor market without further research.

Future research should consider more diverse samples to improve the generalizability of findings and minimize potential sampling bias introduced through the snowball sampling procedure. Additionally, it would be valuable to focus on a more homogeneous sample of respondents in terms of their profession or specific industry to provide deeper insight into motivation across the work context. Further research should also expand the scope from the local region to the entire country's labor market, allowing a comprehensive understanding of motivation across different generations of employees.

7. Conclusion

It is essential to understand the motivational needs of different generations of employees and to respond accordingly, encouraging managers to identify and apply appropriate factors and techniques for each generation's needs. The issue of motivation across generations of employees, besides being a current concern, will continue to interest managers and researchers in the future. According to specific findings, human resource managers can tailor all aspects of human resource management, from recruiting, selecting, and retaining employees to creating an appropriate compensation system and providing deserved feedback. To meet employees' needs, managers must know how to communicate, train or mentor employees, offer suitable material or non-material motivational factors, provide effective feedback, and create a comprehensive human resource approach. Understanding the complexity of employee motivation in relation to generational differences, as well as the ability to apply tailored strategies, is crucial for creating a work environment that fosters high levels of engagement and motivation. When managers motivate employees in ways that align with their unique needs, the organization becomes a place where every individual can grow, and collective success becomes inevitable. Aligning employee motivation with their competencies results in greater productivity and engagement. Ultimately, the flexibility and adaptability of managerial strategies enable the creation of teams that are not only productive but also happy and fulfilled in the workplace, leading to better business performance, greater innovation, and sustainable organizational growth.

The entry of Generation Alpha into the workforce, and the exit of the Baby Boomer generation, will require further adaptation and understanding of their unique needs, values, and aspirations. This understanding will help create a more welcoming environment for them. New generations are highly dependent on technology and have weaker analytical and decision-making skills without technological support. Like previous generations, they seek financial stability, but they place even greater emphasis on work-life balance, work flexibility, mental health, and workforce diversity.

The article is relevant to UN Sustainable Development Goals:



References

- Alaa, G., & Refaat El Said, G. (2022). Generation Z & Y preferences of user acceptance of mobile health recommender systems. *The Business and Management Review*, 13(2), 220–229. <https://doi.org/10.24052/BMR/V13NU02/ART-19>
- Armstrong, M., & Taylor, S. (2014). *Armstrong's handbook of human resource management practice* (13th ed.). Kogan Page.
- Bako, M. (2018). Different leadership style choices, different generations. *Prizren Social Science Journal*, 2(2), 127–143.
- Bargh, J. A., Gollwitzer, P. M., & Oettingen, G. (2010). Motivation. In S. T. Fiske, D. T. Gilbert, & G. Lindzey (Eds.), *Handbook of social psychology* (5th ed., pp. 268–316). Wiley.
- Bhandari, N., Pate, B., Somani, N., & Josh, M. (2025). Integrational differences and their impact on quality of work life: Insights from management faculty in higher education. *Advances in Consumer Research*, 2(4), 4868–4879.
- Bińczycki, B., Łukasiński, W., & Dorocki, S. (2023). Determinants of motivation to work in terms of Industry 4.0 — The Gen Z perspective. *Sustainability*, 15(15), 12069. <https://doi.org/10.3390/su151512069>
- Czerwińska-Lubszczyk, A., & Jankowiak, N. (2025). Motivation in the workplace — a generational perspective. *Management Systems in Production Engineering*, 33(1), 100–114. <https://doi.org/10.2478/mspe-2025-0011>
- Davis, J. B., Pawlowski, S. D., & Houston, A. (2006). Work commitments of Baby Boomers and Gen-Xers in the IT profession: Generational differences or myth? *Journal of Computer Information Systems*, 46(3), 43–49.
- Egerova, D., Komarkova, L., & Rotenbornova, L. (2024). Generational differences in work-related expectations: Examining period and cohort effects. *Economics and Sociology*, 17(4), 103–117. <https://doi.org/10.14254/2071-789X.2024/17-4/6>
- Fero, M., & Dokoupilová, L. (2019). Factors of work motivation and coexistence of generations at the workplace. *Research Papers Faculty of Materials Science and Technology Slovak University of Technology*, 27(s1), 15–24. <https://doi.org/10.2478/rput-2019-0037>
- Field, A. (2018). *Discovering statistics using IBM SPSS statistics* (5th ed.). SAGE.
- Hendriana, E., Christopher, A., Zain, H. O. A., & Pricilia, N. (2023). The role of employer branding in work-life balance and employee retention relationship among Generation Z workers: Mediation or moderation? *Journal of Theory and Applied Management*, 16(1), 124–143. <https://doi.org/10.20473/jmtt.v16i1.41703>
- Heyns, M. M., & Kerr, M. D. (2018). Generational differences in workplace motivation. *SA Journal of Human Resource Management*, 16. <https://doi.org/10.4102/sajhrm.v16i0.967>
- Karácsony, P. (2019). Generational differences in motivation at work in Slovakian small and medium sized companies. *Open Journal of Social Sciences*, 7(3), 182–191. <https://doi.org/10.4236/jss.2019.73015>
- Krasulja, N., Radojević, I., Janjušić, D., & Vujić, N. (2015). Multigeneracijska radna snaga — prednost ili nedostatak za suvremene organizacije. *Practical management : journal of management in theory and practice*, 6(1), 59–68.
- Kupczyk, T., Górski, A., Urbańska, K., Ucieklak-Jeż, P., & Wierzbinski, B. (2024). Values held by Generations X, Y, Z employees as predictors of work motivation. *European Research Studies Journal*, 27(4), 1566–1583. <https://doi.org/10.35808/ersj/3885>
- Lopez, E. N. B., & Abadiano, M. N. (2023). Understanding Generation Z, the new generation of learners: A technological-motivational-learning theory. *Journal of Harbin Engineering University*, 44(10), 770–784.
- Manuti, A., Curci, A., & Van Der Heijden, B. (2018). The meaning of working for young people: The case of the millennials. *International Journal of Training and Development*, 22(4), 274–288. <https://doi.org/10.1111/ijtd.12138>

- Maříková, M., Řehoř, P., Vrchota, J., & Klarner, L. (2025). Factors of work motivation in production engineering for Baby Boomers, Generations X, Y and Z. *Management Systems in Production Engineering*, 33(3), 321–331. <https://doi.org/10.2478/mspe-2025-0031>
- Reeve, J. (2016). A grand theory of motivation: Why not? *Motivation and Emotion*, 40(1), 31–35. <https://doi.org/10.1007/s11031-015-9538-2>
- Řehoř, P., Vrchota, J., & Maříková, M. (2023). Factors motivating generations Baby Boomers, X, Y and Z to change employees. In *Opportunities and threats to current business management in cross-border comparison 2023* (pp. 70–80). GUC – Verlag der Gesellschaft für Unternehmensrechnung und Controlling m.b.H.
- Roberts, K. (2012). The end of the long Baby-boomer generation. *Journal of Youth Studies*, 15(4), 479–497. <https://doi.org/10.1080/13676261.2012.663900>
- Rupčić, N. (2021). Characteristics of post-millennials or the Generation Z as new participants in the labor market. *Collected Papers of Šibenik College*, 15(1–2), 47–60. <https://doi.org/10.51650/ezrvs.15.1-2.3>
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78. <https://doi.org/10.1037/0003-066X.55.1.68>
- Ryan, R. M., & Deci, E. L. (2020). Intrinsic and extrinsic motivation from a self-determination theory perspective: definitions, theory, practices, and future directions. *Contemporary Educational Psychology*, 61, 101860. <https://doi.org/10.1016/j.cedpsych.2020.101860>
- Sauser, J. W. I., & Sims, R. R. (2014). *Managing human resources for the millennial generation*. Information Age Publishing.
- Twenge, J. M., Campbell, S. M., Hoffman, B. J., & Lance, C. E. (2010). Generational differences in work values: Leisure and extrinsic values increasing, social and intrinsic values decreasing. *Journal of Management*, 36(5), 1117–1142. <https://doi.org/10.1177/0149206309352248>
- Van Den Bergh, J., & De Wulf, K. (2017). Millennials at work. *Research World*, 2017(63), 19–21. <https://doi.org/10.1002/rwm3.20490>
- Verma, S., Shukla, V. K., & Sharma, N. (2024). An overview of the opportunities and challenges in entrepreneurship. *International Journal of Management Science Research*, 7(2), 42–49. [https://doi.org/10.53469/ijomsr.2024.07\(02\).06](https://doi.org/10.53469/ijomsr.2024.07(02).06)
- Waworuntu, E. C., Kainde, S. J. R., & Mandagi, D. W. (2022). Work-life balance, job satisfaction and performance among Millennial and Gen Z employees: A systematic review. *Society*, 10(2), 384–398. <https://doi.org/10.33019/society.v10i2.464>
- Wong, M., Gardiner, E., Lang, W., & Coulon, L. (2008). Generational differences in personality and motivation: Do they exist and what are the implications for the workplace? *Journal of Managerial Psychology*, 23(8), 878–890. <https://doi.org/10.1108/02683940810904376>
- Zeynali, S., Pishghadam, R., & Hosseini Fatemi, A. (2019). Identifying the motivational and demotivational factors influencing students' academic achievements in language education. *Learning and Motivation*, 68, 101598. <https://doi.org/10.1016/j.lmot.2019.101598>